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EXAMINER

HUANG, CHENG YUAN

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/553,022 | <b>Applicant(s)</b><br>ANGELA ET AL. |  |
|                              | <b>Examiner</b><br>CHENG HUANG       | <b>Art Unit</b><br>1794              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-21 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20091216</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-13 and 15-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 16 is unclear given that it is confusing as to how the recited second cover layer maybe be both on the diametrically opposite surface of the base layer and between the base layer and the first cover layer. For the purpose of examination, the second cover layer is interpreted to be disposed between the base layer and the first cover layer.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 2-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 16 recites “the second cover layer...is between the base layer and the first cover layer”, which does not appear to be supported by the originally filed specification.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 2-5, 8-11, 13 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Dallman et al. (U.S. Patent No. 4,572,854) and as evidenced by Crass et al. (U.S. Patent No. 4,786,533).

9. Regarding claim 16, Demeuse teaches a multilayered transparent biaxially oriented polypropylene film (col. 3, lines 7-9, lines 65-67, col. 4, line 36) which comprises a base layer (polypropylene/hydrocarbon layer, col. 3, lines 7-9, lines 65-67, col. 4, line 36) and a first cover layer (surface layer, col. 3, lines 65-67, col. 4, lines 57-59), wherein the base layer has a hydrocarbon resin (col. 3, lines 54-63) and the first cover layer has a cold sealing adhesive coating on its outer surface (functional layer, col. 5, lines 10-15).

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10. Demeuse fails to explicitly teach a second cover layer is applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer.

11. However, Dallmann et al. teaches a multilayered transparent oriented polypropylene film (See Abstract and Example 2, col. 8, line 35) comprising a base layer (lower first layer B, col. 2, lines 57-58, Fig. 6), a first cover layer (upper first layer B, col. 2, lines 57-58, Fig. 6) having a cold sealing adhesive coating on its outer surface (upper sealable outer layer A, col. 5, line 45-col 6, line 36 and 61-64, Fig. 6), and a second cover layer applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer (barrier layer D, col. 3, line 65, Fig. 6).

12. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the gas barrier layer of Dallmann et al. as the second cover layer between the first cover layer and base layer in the multilayered film of Demeuse for improved stretchability and for gas and aroma barrier capabilities (Dallman et al., col. 4, lines 17-20, col. 6, lines 48-57).

13. Regarding claim 17, Demeuse as modified by Dallmann et al. teaches wherein the first cover layer has a thickness approximately 2.5 to 3.8  $\mu\text{m}$  (Demeuse, col. 4, lines 25-27), which overlaps the claimed range of greater than 0.1  $\mu\text{m}$ .

14. Regarding claim 2, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the base layer contains an isotactic polypropylene (Demeuse, col. 3, lines 14-20).

15. While Demeuse does not explicitly disclose the melting point of the isotactic polypropylene, it is inherent that the melting point of isotactic polypropylene is not less than

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about 140°C, as evidenced by Crass et al. (col. 2, lines 16-22), which anticipates the claimed range of 155-165°C.

16. Regarding claim 3, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the base layer contains the hydrocarbon resin in a quantity of up to about 15 weight percent (Demeuse, col. 2, lines 54-59), which overlaps the claimed range of 5 to 20 weight-percent, in relation to the weight of the base layer.

17. Regarding claim 4, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the hydrocarbon resin contains a non-hydrogenated styrene polymer, a methylstyrene- styrene copolymer, cyclopentadiene polymer, an  $\alpha$ -pinene polymer,  $\beta$ -pinene polymer, or terpene polymers and hydrogenated compounds thereof, or hydrated  $\alpha$ -methylstyrene-vinyl toluene copolymer or mixtures thereof (Demeuse, col. 3, lines 29-55).

18. Regarding claim 5, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the hydrocarbon resin has a softening point of less than about 140°C (Demeuse, col. 3, lines 58-59), which overlaps the claimed range of 100 to 160°C.

19. Regarding claim 8, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the second cover layer made of polyolefinic polymers (Demeuse, col.4, lines 58-61 and col. 5, lines 6-8).

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20. Regarding claim 9, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein a release layer is applied to the surface diametrically opposite the first cover layer as the outer layer (Demeuse, col.4, lines 58-61 and col. 5, lines 16-18), whose surface is deemed to have a low adhesion in relation to cold sealing coatings since it is of a releasing nature.

21. Regarding claim 10, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the release layer is a release film and/or a second coextruded cover layer (col. 5, lines 16-18, col. 6, lines 28-32).

22. Regarding claim 11, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film Demeuse, (col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the base layer contains an antistatic agent (Demeuse, col. 6, lines 60-61).

23. Regarding claim 13, Demeuse as modified by Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the first cover layer contains antiblocking agent (Demeuse, col. 6, line 61).

24. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Dallman et al. (U.S. Patent No. 4,572,854) and Crass et al. (U.S. Patent No. 4,786,533) and further, in view of Fatica et al. (U.S. Patent No. 6,033,786).

25. Demeuse as modified by Dallmann et al. is relied upon as disclosed above.

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26. Regarding claim 18, Demeuse as modified by Dallmann et al. teaches wherein the first cover layer has a thickness in the range approximately 2.5 to 3.8  $\mu\text{m}$  (about 0.1 to 0.15 mil, Demeuse, col. 4, lines 25-27), which overlaps the claimed range of from 0.3 to 3  $\mu\text{m}$ .

27. Demeuse as modified by Dallmann et al. fail to explicitly disclose neither the thickness of the second cover layer nor the total thickness of the film.

28. However, Fatica et al. teaches a multilayered transparent biaxially oriented polypropylene film (See Abstract) wherein the second cover layer has a thickness of approximately 0.073 to 8.8  $\mu\text{m}$  (functional layer is between about 1.25 and 43.5% the thickness of the core layer which is about 0.23 to 0.8 mil, col. 7, lines 8-18), which encompasses the claimed range of from 0.5 to 2  $\mu\text{m}$ .

29. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Fatica et al. for the first cover layer of Demeuse as modified by Dallmann et al. for flexibility in food packaging.

30. Dallmann et al. teaches wherein the cold sealing adhesive coating has a thickness of between 1 and 3 microns (col. 2, line 66-col. 3, line 1).

31. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Dallmann et al. for the cold sealing adhesive coating of Demeuse for controlling cost (Dallmann et al., col. 2, lines 66-67).

32. Given the thickness of the layers as disclosed above, and in addition to the thickness of the base layer of Demeuse to be approximately 5.8-22.8  $\mu\text{m}$  (about 0.23 to 0.9 mil, col. 4, lines 23-25), the film has a total calculated thickness of approximately 9 to 38  $\mu\text{m}$ , which falls within the claimed range of from 4 to 60  $\mu\text{m}$ .



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33. Regarding claim 19, Demeuse as modified by Dallmann et al. fail to explicitly disclose the thicknesses of the first cover layer, second cover layer, and the total film.

34. However, Fatica et al. teaches a multilayered transparent biaxially oriented polypropylene film (See Abstract) wherein the first and second cover layers each have a thickness of approximately 0.073 to 8.8  $\mu\text{m}$  (functional layer is between about 1.25 and 43.5% the thickness of the core layer which is about 0.23 to 0.8 mil, col. 7, lines 8-18), which encompasses the claimed range of from 0.5 to 2  $\mu\text{m}$ .

35. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Fatica et al. for the first and second cover layers of Demeuse as modified by Dallmann et al. for flexibility in food packaging.

36. Dallmann et al. teaches wherein the cold sealing adhesive coating has a thickness of between 1 and 3 microns (col. 2, line 66-col. 3, line 1).

37. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the thickness as taught by Dallmann et al. for the cold sealing adhesive coating of Demeuse for controlling cost (Dallmann et al., col. 2, lines 66-67).

38. Given the thickness of the layers as disclosed above, and in addition to the thickness of the base layer of approximately 5.8-22.8  $\mu\text{m}$  of Demeuse to be (about 0.23 to 0.9 mil, col. 4, lines 23-25), the film has a total calculated thickness of approximately 6.9 to 43  $\mu\text{m}$ , which encompasses the claimed range of from 6 to 25 $\mu\text{m}$ .

39. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Dallmann et al. (U.S. Patent No. 4,572,854) and Fatica et

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al. (U.S. Patent No. 6,033,786) and, further, in view of Murschall et al. (U.S. Patent No. 5,436,041).

40. Demeuse as modified by Dallmann et al. and Fatica et al. is relied upon as disclosed above.

41. Regarding claim 20, Demeuse teaches a multilayered transparent biaxially oriented polypropylene film (col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the first cover layer contains antiblocking agent (col. 6, line 61). Demeuse teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the first cover layer is synthesized from propylene terpolymers (Demeuse, col. 5, lines 6-8). Demeuse teaches a multilayered transparent biaxially oriented polypropylene film (col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the first cover layer contains antiblocking agent (col. 6, line 61).

42. Demeuse as modified by Dallmann et al. fails to teach wherein the propylene copolymers and terpolymers having a propylene content of at least 80 weight-percent in relation to the polymer.

43. However, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) wherein the first cover layer is synthesized from propylene copolymers or propylene terpolymers or mixtures of these polymers, wherein the propylene copolymers and terpolymers has a propylene content of about 93.2 to 99.0 weight percent (col. 3, lines 33-41), which falls within the claimed range of at least 80 weight-percent in relation to the polymer.

44. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the propylene content of the propylene copolymers and terpolymers of Demeuse as

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modified by Dallmann et al., including those of the claimed range for stability in rigidity (Crass et al., col. 1, lines 18-21 and 40-41).

45. Demeuse as modified by Dallmann et al. and Fatica et al. fails to teach neutralization agents and stabilizers.

46. However, Murschall et al. teaches the polypropylene film wherein all layers of the film, which includes the first cover layer contain neutralization agents and stabilizers (col. 7, lines 57-63).

47. It would have been obvious to one of ordinary skill in the art at the time of the invention to include neutralization agents in the film of Demeuse as modified by Dallmann et al. to control pH.

48. Regarding claim 21, Demeuse as modified by Dallmann et al., Fatica et al., and Murschall et al. teaches a multilayered transparent biaxially oriented polypropylene film (Demeuse, col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein a release layer is applied to the surface diametrically opposite the first cover layer as the outer layer (Demeuse, col.4, lines 58-61 and col. 5, lines 16-18), whose surface is deemed to have a low adhesion in relation to cold sealing coatings since it is of a releasing nature.

49. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Dallman et al. (U.S. Patent No. 4,572,854) and Crass et al. (U.S. Patent No. 4,786,533).

50. Demeuse as modified by Dallmann et al. is relied upon as disclosed above.

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51. Regarding claim 6, Demeuse teaches a multilayered transparent biaxially oriented polypropylene film (col. 3, lines 7-9, lines 65-67, col. 4, line 36) wherein the first cover layer is synthesized from propylene terpolymers (col. 5, lines 6-8).

52. Demeuse as modified by Dallmann et al. fails to teach wherein the propylene copolymers and terpolymers having a propylene content of at least 80 weight-percent in relation to the polymer.

53. However, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) wherein the first cover layer is synthesized from propylene copolymers or propylene terpolymers or mixtures of these polymers, wherein the propylene copolymers and terpolymers has a propylene content of about 93.2 to 99.0 weight percent (col. 3, lines 33-41), which falls within the claimed range of at least 80 weight-percent in relation to the polymer.

54. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the propylene content of the propylene copolymers and terpolymers of Demeuse as modified by Dallmann et al., including those of the claimed range for stability in rigidity (Crass et al., col. 1, lines 18-21 and 40-41).

55. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Dallman et al. (U.S. Patent No. 4,572,854) and Wilkie et al. (U.S. Patent No. 5,482,780).

56. Demeuse as modified by Dallmann et al. is relied upon as disclosed above.

57. Regarding claim 7, Demeuse as modified by Dallmann et al. fails to teach the surface of the first cover layer being treated using corona, plasma, or flame.

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58. However, Wilkie teaches a multilayered biaxially oriented polypropylene film (col. 5, lines 1-7) wherein the surface of the first cover layer is pretreated using corona or flame (col. 4, lines 27-31).

59. It would have been obvious to one of ordinary skill in the art at the time of the invention to using corona or flame treatment on the surface of the first cover layer of Demeuse as modified by Dallmann et al. to improve the bond between the surface of the first cover layer and the cold sealing adhesive (Wilkie et al., col. 4, lines 24-27).

60. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demeuse (U.S. Patent No. 6,165,599) in view of Dallman et al. (U.S. Patent No. 4,572,854) and Murschall et al. (U.S. Patent No. 5,436,041).

61. Demeuse is relied upon as disclosed above.

62. Regarding claim 12, Demeuse as modified by Dallmann et al. fails to teach neutralization agents and stabilizers.

63. However, Murschall et al. teaches the polypropylene film wherein all layers of the film contain neutralization agents and stabilizers (col. 7, lines 57-63).

64. It would have been obvious to one of ordinary skill in the art at the time of the invention to include neutralization agents in the film of Demeuse as modified by Dallmann et al. to control pH.

65. Regarding claim 15, Demeuse as modified by Dallmann et al. fails to teach wherein said antistatic agent is tertiary aliphatic amine.

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66. However, Murschall et al. teaches the polypropylene film wherein said antistatic agent is tertiary aliphatic amine (col. 8, lines 3-7).

67. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a tertiary aliphatic amine in the film of Demeuse as modified by Dallmann et al. for eliminating the effects of static electricity.

68. Claims 2-6, 11, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crass et al. (U.S. Patent No. 4,786,533) in view of Demeuse (U.S. Patent No. 6,165,599) and Dallman et al. (U.S. Patent No. 4,572,854).

69. Regarding claim 16, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) which comprises a base layer (col. 2, lines 16-18), a first cover layer (col. 3, lines 27-28), wherein the base layer has a hydrocarbon resin (col. 2, lines 4-7) and the first cover layer has a cold sealing adhesive coating on its outer surface (col. 3, lines 27-28 and 51-53).

70. Crass et al. fails to explicitly disclose the film being biaxially oriented or that a second cover layer is applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer.

71. However, Demeuse teaches a multilayered transparent biaxially oriented polypropylene film (col. 3, lines 7-9, lines 65-67, col. 4, line 36).

72. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose to biaxially orient the film of Crass et al. to improve the tensile strength and tensile modulus (Demeuse, col. 6, lines 37-40).

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73. Crass et al. and Demeuse fail to explicitly teach a second cover layer is applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer.

74. However, Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (See Abstract and Example 2, col. 8, line 35) comprising a base layer (lower first layer B, col. 2, lines 57-58, Fig. 6), a first cover layer (upper first layer B, col. 2, lines 57-58, Fig. 6) having a cold sealing adhesive coating on its outer surface (upper sealable outer layer A, col. 5, line 45-col 6, line 36 and 61-64, Fig. 6), and a second cover layer applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer (barrier layer D, col. 3, line 65, Fig. 6).

75. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the gas barrier layer of Dallmann et al. as the second cover layer in the multilayered film of Crass et al. for improved stretchability and for gas and aroma barrier capabilities (Dallman et al., col. 4, lines 17-20, col. 6, lines 48-57).

76. Regarding claim 2, Crass et al. as modified by Demeuse and Dallmann et al. teaches a multilayered transparent polypropylene film (Crass et al., Abstract) wherein the base layer contains an isotactic polypropylene having a melting point of not less than 140°C (Crass et al., col. 2, lines 17-22), which encompasses the claimed range of 155-165°C.

77. Regarding claim 3, Crass et al. as modified by Demeuse and Dallmann et al. teaches a multilayered transparent polypropylene film (Crass et al., Abstract) wherein the base layer contains the hydrocarbon resin in a quantity of about 10 to 40 weight percent (Crass et al., col. 2,

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lines 5-9), which overlaps the claimed range of 5 to 20 weight-percent, in relation to the weight of the base layer.

78. Regarding claim 4, Crass et al. as modified by Demeuse and Dallmann et al. teaches a multilayered transparent polypropylene film (Crass et al., Abstract) wherein the hydrocarbon resin contains a non-hydrogenated styrene polymer, a methylstyrene- styrene copolymer, cyclopentadiene polymer, an  $\alpha$ -pinene polymer,  $\beta$ -pinene polymer, or terpene polymers and hydrogenated compounds thereof, or hydrated  $\alpha$ -methylstyrene-vinyl toluene copolymer or mixtures thereof (Crass et al., col. 2, line 49-col. 3, line 11).

79. Regarding claim 5, Crass et al. as modified by Demeuse and Dallmann et al. teaches a multilayered transparent polypropylene film (Crass et al., Abstract) wherein the hydrocarbon resin has a softening point of 60 to 180°C (Crass et al., col. 3, lines 11-12), which encompasses the claimed range of 100 to 160°C.

80. Regarding claim 6, Crass et al. as modified by Demeuse and Dallmann et al. teaches a multilayered transparent polypropylene film (Crass et al., Abstract) wherein the first cover layer is synthesized from propylene copolymers or propylene terpolymers or mixtures of these polymers, wherein the propylene copolymers and terpolymers has a propylene content of about 93.2 to 99.0 weight percent (Crass et al., col. 3, lines 33-41), which falls within the claimed range of at least 80 weight-percent in relation to the polymer.

81. Regarding claim 11, Crass et al. as modified by Demeuse and Dallmann et al. teaches a multilayered transparent polypropylene film (Crass et al., Abstract) wherein the base layer contains an antistatic agent (Crass et al., col. 4, lines 3-6).



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82. Regarding claim 13, Crass et al. as modified by Demeuse and Dallmann et al. teaches a multilayered transparent polypropylene film (Crass et al., Abstract) wherein the first cover layer contains antiblocking agent (Crass et al., col.4, lines 8-12).

83. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crass et al. (U.S. Patent No. 4,786,533) in view of Demeuse (U.S. Patent No. 6,165,599) and Dallman et al. (U.S. Patent No. 4,572,854) and further in view of Wilkie et al. (U.S. Patent No. 5,482,780).

84. Crass et al. in view of Demeuse and Dallmann et al. is relied upon as disclosed above.

85. Regarding claim 7, Crass et al. as modified by Crass et al. and Dallmann et al. fails to teach the surface of the first cover layer being treated using corona, plasma, or flame.

86. However, Wilkie teaches a multilayered biaxially oriented polypropylene film (col. 5, lines 1-7) wherein the surface of the first cover layer is pretreated using corona or flame (col. 4, lines 27-31).

87. It would have been obvious to one of ordinary skill in the art at the time of the invention to using corona or flame treatment on the surface of the first cover layer of Crass et al. to improve the bond between the surface of the first cover layer and the cold sealing adhesive (Wilkie et al., col. 4, lines 24-27).

88. Regarding claim 8, Crass et al. as modified by Demeuse and Dallmann et al. fails to teach wherein a second cover layer made of polyolefinic polymers

89. However, Wilkie et al. teaches a multilayered biaxially oriented polypropylene film (col. 5, lines 1-7) wherein the second cover layer (the cold release layer) made of polyolefinic polymers (ethylene and propylene, col. 3, line 22).

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90. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a second cover layer of polyolefinic polymers on the film of Crass et al. for release properties.

91. Regarding claim 9, Crass et al. as modified by Demeuse and Dallmann et al. fails to teach a release layer is applied to the surface diametrically opposite the first cover layer as the outer layer, whose surface has a low adhesion in relation to cold sealing coatings.

92. However, Wilkie et al. teaches a multilayered biaxially oriented polypropylene film (col. 5, lines 1-7) wherein a release layer (the cold release layer) is applied to the surface diametrically opposite the first cover layer as the outer layer (col. 2, line 66-col. 3, line 1), whose surface demonstrates "good to excellent" cold seal release (C.S.R.) (col. 7, lines 45-46) which is a teaching of the surface of the release layer being of low adhesion in relation to cold sealing coatings.

93. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a release layer on the film of Crass et al. for release.

94. Regarding claim 10, Crass et al. fails to teach the release layer is a release lacquer, a release film, or a second coextruded cover layer.

95. However, Crass et al. as modified by Demeuse and Wilkie et al. teaches a multilayered biaxially oriented polypropylene film (col. 5, lines 1-7) wherein the release layer (the cold release layer) is a release film and a second coextruded cover layer (col. 5, line 37).

96. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crass et al. (U.S. Patent No. 4,786,533) in view of Demeuse (U.S. Patent No. 6,165,599) and Dallman et

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al. (U.S. Patent No. 4,572,854) and further in view of Murschall et al. (U.S. Patent No. 5,436,041).

97. Crass et al. in view of Demeuse and Dallman et al. is relied upon as disclosed above.

98. Regarding claim 12, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) wherein all layers of the film contain stabilizers (col. 4, lines 3-7).

99. Crass et al. as modified by Demeuse and Dallmann et al. fails to teach neutralization agents.

100. However, Murschall et al. teaches the polypropylene film wherein all layers of the film contain neutralization agents and stabilizers (col. 7, lines 57-63).

101. It would have been obvious to one of ordinary skill in the art at the time of the invention to include neutralization agents in the film of Crass et al. as modified by Demeuse and Dallmann et al. to control pH.

102. Regarding claim 15, Crass et al. as modified by Demeuse and Dallmann et al. fails to teach wherein said antistatic agent is tertiary aliphatic amine.

103. However, Murschall et al. teaches the polypropylene film wherein said antistatic agent is tertiary aliphatic amine (col. 8, lines 3-7).

104. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a tertiary aliphatic amine in the film of Crass et al. as modified by Demeuse and Dallmann for eliminating the effects of static electricity.

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105. Claims 2-11, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkie et al. (U.S. Patent No. 5,482,780) in view of Crass et al. (U.S. Patent No. 4,786,533) and Dallman et al. (U.S. Patent No. 4,572,854).

106. Regarding claim 16, Wilkie et al. teaches a multilayered biaxially oriented polypropylene film (col. 5, lines 1-7) made of a base layer (the core layer) and at least one first cover layer (the cold seal receptive layer) wherein the cover layer has a cold sealing adhesive coating (cold seal composition, col. 1, lines 22-25) on the outer surface of the cover layer (col. 3, lines 2-4).

107. Wilkie et al. fails to teach wherein the base layer has a hydrocarbon resin or that a second cover layer is applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer.

108. However, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) made of a base layer (col. 2, lines 16-18), wherein the base layer has a hydrocarbon resin (col. 2, lines 4-7).

109. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a hydrocarbon resin in the film of Wilkie et al. to control the modulus of elasticity of the film (Crass et al., col. 3, lines 19-26).

110. Wilkie et al. and Crass et al. fail to explicitly teach a second cover layer is applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer.

111. However, Dallmann et al. teaches a multilayered transparent biaxially oriented polypropylene film (See Abstract and Example 2, col. 8, line 35) comprising a base layer (lower first layer B, col. 2, lines 57-58, Fig. 6), a first cover layer (upper first layer B, col. 2, lines 57-58,

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Fig. 6) having a cold sealing adhesive coating on its outer surface (upper sealable outer layer A, col. 5, line 45-col 6, line 36 and 61-64, Fig. 6), and a second cover layer applied to the diametrically opposite surface of the base layer and is between the base layer and the first cover layer (barrier layer D, col. 3, line 65, Fig. 6).

112. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the gas barrier layer of Dallmann et al. as the second cover layer in the multilayered film of Crass et al. for improved stretchability and for gas and aroma barrier capabilities (Dallman et al., col. 4, lines 17-20, col. 6, lines 48-57).

113. While Wilkie et al. fails to explicitly state the transparency of the film, besides it having “excellent optics” (col. 2, line 30), the film of Wilkie et al. as modified by Crass et al. and Dallmann et al. is reasonably expected to be highly transparent since the invention of Wilkie et al. as modified by Crass et al. and Dallmann et al. comprises similar, if not identical, materials to those of the instantly claimed invention including a base layer comprising biaxially oriented isotactic polypropylene (Wilkie et al., col. 3, line 65-col. 4, line 2, col. 5, line 7) and a cover layer comprising propylene copolymer (Wilkie et al., col. 4, lines 18-21).

114. Regarding claim 2, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein the base layer contains an isotactic polypropylene (Wilkie et al., col. 3, lines 65-66).

115. Wilkie et al. does not explicitly state the melting point of the isotactic polypropylene.

116. However, Crass et al. teaches a multilayered transparent polypropylene film (See Abstract) wherein the base layer contains an isotactic polypropylene having a melting point of not less than 140°C (col. 2, lines 17-22), which encompasses the claimed range of 155-165°C.

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117. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the melting point of isotactic polypropylene to include those of the claimed range for the base layer of Wilkie et al. as modified by Crass et al. and Dallmann et al. to control the physical state of the film with respect to temperature.

118. Regarding claims 3, 4, and 5, Wilkie et al. fails to teach hydrocarbon resin.

119. However, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches a multilayered transparent polypropylene film (Wilkie et al., col. 5, lines 1-7) wherein the base layer contains the hydrocarbon resin in a quantity of about 10 to 40 weight percent (Crass et al, col. 2, lines 5-9), which overlaps the claimed range of 5 to 20 weight-percent, in relation to the weight of the base layer and wherein the hydrocarbon resin contains a non-hydrogenated styrene polymer, a methylstyrene- styrene copolymer, cyclopentadiene polymer, an  $\alpha$ -pinene polymer,  $\beta$ -pinene polymer, or terpene polymers and hydrogenated compounds thereof, or hydrated  $\alpha$ -methylstyrene-vinyl toluene copolymer or mixtures thereof (Crass et al, col. 2, line 49-col. 3, line 11) and has a softening point of 60 to 180°C (Crass et al, col. 3, lines 11-12), which encompasses the claimed range of 100 to 160°C.

120. Regarding claim 6, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein the first cover layer (the cold seal receptive layer) is synthesized from propylene copolymers (Wilkie et al., col. 4, lines 19-22). Wilkie et al. as modified by Crass et al. and Dallmann et al. also teaches the propylene copolymers having a propylene content of about 92 to 98 weight-percent, which falls within the claimed at least 80 weight-percent in relation to the polymer.

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121. Regarding claim 7, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein the surface of the first cover layer is pretreated using corona or flame (Wilkie et al., col. 4, lines 27-31).

122. Regarding claim 8, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein a second cover layer (Wilkie et al., the cold release layer) made of polyolefinic polymers (Wilkie et al., ethylene and propylene, col. 3, line 22).

123. Regarding claim 9, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein a release layer (Wilkie et al., the cold release layer) is applied to the surface diametrically opposite the first cover layer as the outer layer (Wilkie et al., col. 2, line 66-col. 3, line 1), whose surface demonstrates "good to excellent" cold seal release (C.S.R.) (Wilkie et al., col. 7, lines 45-46) which is a teaching of the surface of the release layer being of low adhesion in relation to cold sealing coatings.

124. Regarding claim 10, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein the release layer (the cold release layer) is a release film and a second coextruded cover layer (Wilkie et al., col. 5, lines 35-37).

125. Regarding claim 11, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein the base layer contains an antistatic agent (Wilkie et al., col. 3, lines 52-57).

126. Regarding claim 13, Wilkie et al. as modified by Crass et al. and Dallmann et al. teaches the polypropylene film wherein the first cover layer contains antiblocking agent (Wilkie et al., col. 3, lines 52-57).

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127. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkie et al. (U.S. Patent No. 5,482,780) in view of Crass et al. (U.S. Patent No. 4,786,533) and Dallman et al. (U.S. Patent No. 4,572,854) and further in view of Murschall et al. (U.S. Patent No. 5,436,041).

128. Wilkie et al. in view of Crass et al. and Dallman et al. is relied upon as disclosed above.

129. Regarding claim 12, Wilkie as modified by Crass et al. and Dallmann et al. fails to teach wherein all layers of the film contain neutralization agents and stabilizers.

130. However, Murschall et al. teaches the polypropylene film wherein all layers of the film contain neutralization agents and stabilizers (col. 7, lines 57-63).

131. It would have been obvious to one of ordinary skill in the art at the time of the invention to include neutralization agents and stabilizers in the film of Wilkie et al. as modified by Crass et al. and Dallmann et al. to control pH and stability.

132. Regarding claim 15, Wilkie et al. as modified by Crass et al. and Dallmann et al. fails to teach wherein said antistatic agent is tertiary aliphatic amine.

133. However, Murschall et al. teaches the polypropylene film wherein said antistatic agent is tertiary aliphatic amine (col. 8, lines 3-7).

134. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a tertiary aliphatic amine in the film of Wilkie et al. as modified by Crass et al. and Dallmann et al. for eliminating the effects of static electricity.



***Response to Arguments***

135. Applicants' arguments with respect to claims 2-13 and 15-21 have been considered but are moot in view of the new ground(s) of rejection.

136. Applicants amended new claim 16 as the independent claim and the order to be that the second cover layer is between the base layer and the first cover layer.

137. Applicants argue that "a person of ordinary skill in the art can only derive film structures from such teachings where the hard resin modified base layer is in a direct contact with the cold seal layer (see col. 5, lines 10-15 of Demeuse...)."

138. However, as indicated in the rejection above, col. 4, lines 55-59 of Demeuse teaches that the first cover layer may be between the base layer and the cold seal layer as well as on the other side of the base layer, additionally.

139. Applicants argue that "If a person of ordinary skill in the art would now choose a cold seal layer for the functional layer in the above given structures the person would never get a film according to the structure of the applicant's claim 16, which is..."

140. However, it is not clear what Applicant is stating given that the claim recites that the second cover layer is between the base layer and the first cover layer rather than on the opposite surface of the base layer (Blend of PP + hard resin) from the first cover layer (functional layer), as depicted in Applicants' figure on Page 9.

141. Applicants argue that "the person of ordinary skill in the art would either end up with a structure wherein such cold seal layer is applied onto a resin modified layer, or get a structure wherein the hard resin modified layer is one surface and the cold seal layer is the other surface on a non-modified polypropylene core layer."

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142. However, as disclosed in the rejections of claim 16 above, Demeuse teaches a base layer (col. 3, lines 7-9, lines 65-67, col. 4, line 36), a first cover layer applied on the base layer (col. 3, lines 65-67, col. 4, lines 57-59) wherein the first cover layer has a cold sealing adhesive coating on its outer surface (col. 5, lines 10-15) given that Demeuse teaches the use of having one or more functional layers on at least one of its surfaces (col. 5, lines 64-67), which already has the first cover layer recited above, and wherein the functional layer comprises a cold seal adhesive, it is clear that the multilayered film of Demeuse comprises both surface layers and functional layers.

143. Applicants argue that “From this teaching it is impossible to create structure of a resin modified base layer with a polyolefin non-modified surface layer and a cold seal layer on the surface of such surface layer without hard resin.”

144. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “non-modified” surface layer and surface layer “without hard resin”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

145. Applicants argue that “Obviously there is no suggestion to add a cold seal layer to the functional layer and even less there is any motivation to do that specifically for a selected embodiment A2.”

146. However, as discussed above, Demeuse teaches a base layer (col. 3, lines 7-9, lines 65-67, col. 4, line 36), a first cover layer applied on the base layer (col. 3, lines 65-67, col. 4, lines

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57-59) wherein the first cover layer has a cold sealing adhesive coating on its outer surface (col. 5, lines 10-15) given that Demeuse teaches the use of having one or more functional layers on at least one of its surfaces (col. 5, lines 64-67), which already has the first cover layer recited above, and wherein the functional layer comprises a cold seal adhesive, it is clear that the multilayered film of Demeuse comprises both surface layers and functional layers. Applicant indicates that Demeuse teaches only the functional layers. However, Demeuse teaches both surface layers and functional layers.

147. Applicant argues that "Demeuse is completely silent about any effect that the hard resin might have on the function of the cold seal layer."

148. However, while Demeuse is silent about any effect of that hard resin might have on the function of the cold seal layer, Demeuse does disclose the structure as presently claimed and as disclosed in the rejection of claim 16 above. There is nothing in the claim that requires any effect of the hard resin on the function of the sold seal layer.

149. Applicant argues that "Wilkie does not disclose the base layer has a hydrocarbon resin and ...the second cover layer is applied to the diametrically opposite surface of the base layer."

150. However, it is agreed that Wilkie does not teach the cited limitations, and therefore, Crass et al. and Dallmann et al. are used to teach these limitations.

***Conclusion***

151. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

152. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

153. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENG YUAN HUANG whose telephone number is (571) 270-7387. The examiner can normally be reached on Monday-Thursday from 8 AM to 4 PM.

154. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho, can be reached at 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

155. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. H./

Cheng Yuan Huang

Examiner, Art Unit 1794

March 12, 2010

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794